Fire Prevention Division

Certification Information Packet

Version September 2017, 2015 SFC

TABLE OF CONTENTS

Fire Marshal's Welcome Letter Page 3

General Certification Information Page 4

Certification Exam Bibliographies Page 9
- Automatic Sprinkler Page 10
- Engineered/Pre-engineered Systems
  - Foam Page 11
  - Carbon Dioxide Page 12
  - Halon Page 13
  - Dry/Wet Chemical Page 14
- Emergency Generators Page 15
- Fire Alarm Systems Page 16
- Fire Extinguishers Page 17
- Fire Pumps Page 18
- Smoke Control Page 19
- Standpipes Page 21

Reprints of SFD Administrative Rules Page 22

- Administrative Rule 9.01.17 Page 23 (Certificates of Competency for Installing, Inspecting, Testing and Maintaining Fire Protection Systems)
- Administrative Rule 9.02.17 Page 29 (Inspection, Testing, Maintenance and Reporting Requirements for Fire Protection Systems)
- Administrative Rule 9.03.17 Page 36 (Automatic Sprinkler and Standpipe Systems)
- Administrative Rule 9.04.17 Page 43 (Impaired Fire Protection Systems)

City of Seattle
Seattle Fire Department

Customers Pursuing Seattle Certification for Fire and Life Safety System

The Seattle Fire Department (SFD) welcomes you to the Certification Section of the Fire Marshal's Office. This informational packet is written to help you in obtaining certification to perform work on fire protection and/or life safety systems in the city of Seattle. For those interested in securing first time certification or prior holders of a SFD Certificate, this booklet will help you through the process.

The Seattle Fire Department certifies individuals who install, inspect, test or maintain fire protection and life safety systems per the Seattle Fire Code, Chapter 9, Section 901.4.7. Adherence to rules and guidelines associated with the Seattle Fire Code and published industry standards is a condition of certification. Your certificate will allow you to perform specific duties that will be listed on your SFD-issued certification card. Please note that Seattle certification is not a substitute for state certification, which may also be required.

Starting with the Table of Contents, this certification packet provides pertinent information including telephone numbers, definitions for each of the certifications, a bibliography listing materials from which the test questions are derived, criteria for the exams, fees, and limitations.

We look forward to working in partnership with you to promote the safety of those who live, work, and visit the city of Seattle.

If you have any questions or need assistance regarding our certification program, please contact the Certification Unit at (206) 386-1351.

James P. Woodbury

Deputy Chief James Woodbury
Fire Marshal
Seattle Fire Department

Fire Marshal's Office
220 Third Avenue South
Seattle, WA 98104-2608

Tel (206) 386-1450
Fax (206) 386-1348
www.seattle.gov/fire

GENERAL CERTIFICATION INFORMATION

This document provides our customers with information on how to obtain a certificate from the Seattle Fire Department to install, inspect, test and maintain fire protection and life safety systems in the city of Seattle.

Types of Certification Available

The following categories of certifications are presently available from the Seattle Fire Department.

Type AS-ITT(S)	Inspection, testing, and maintenance of water based fire protection systems, State Level Inspection and Testing Technician Certification.
Type AS-2(S)	Installation, inspection, testing, and maintenance of automatic sprinkler systems, State Level II (Group R single or dual family residential occupancy buildings up to and including four stories and Residential Sprinkler Fitters).
Type AS-3(S)	Installation, inspection, testing, and maintenance of automatic sprinkler systems, State Level III (all buildings and Journey Level Sprinkler Fitters).
Type E-1	Installation, inspection, testing, and maintenance of foam fire extinguishing systems; must also maintain AS-3(S) certification.
Type E-2	Installation, inspection, testing, and maintenance of carbon dioxide fire extinguishing systems.
Type E-3	Installation, inspection, testing, and maintenance of engineered, clean agent or replacement agent fire extinguishing systems.
Type E-4	Installation, inspection, testing, and maintenance of engineered dry/wet chemical fire extinguishing systems.
Type EG-1	Installation (non-electrical), inspection, testing, and maintenance of emergency generators.
Type EG-ITM	Inspection, testing, and maintenance of emergency generators.
Type FA-1	Inspection, testing, and maintenance of automatic fire alarm systems in any building.
Type FA-ITM	Inspection, testing (except “acceptance testing”), and maintenance of automatic fire alarm systems.
Type FP-1	Installation (non-electrical), inspection, testing, and maintenance of fire pumps and controllers.
Type FP-ITM	Inspection, testing and maintenance of fire pumps and controllers.
Type FEX-1	All activities relating to portable fire extinguishers including those listed in Types FEX-2, FEX-3, and FEX-4.
Type FEX-2	Installation, inspection, testing, maintenance, charging, and recharging of portable fire extinguishers.

Type FEX-3	Hydrostatic testing of fire extinguisher cylinders.
Type FEX-4	Annual external examination of CO_2 or stored pressure fire extinguishers equipped with pressure indicators or gauges.
Type SC-1	Installation, inspection, testing, and maintenance of smoke control systems.
Type SC-ITM	Inspection, testing, and maintenance of smoke control systems.
Type STP-ITM	Inspection, testing, and maintenance of standpipe systems *(installation of standpipes requires a sprinkler certification, which also covers inspection, testing and maintenance of standpipes).*

Applications
To download an application for testing, certification annual renewal, or a replacement card, visit the Certification webpage at www.seattle.gov/fire/FMO/certification/certification.htm. Applications are also available to candidates on the scheduled test day.

Contact Us
If you have questions or need more information, please contact us:

Fire Marshal's Office Certification Unit
Telephone: (206) 386-1444 or (206) 386-1351

The Seattle Fire Marshal's Office is located near Pioneer Square at 220 3rd Avenue South on the second floor.

Scheduling
To make an appointment, call the Certification Unit at (206) 386-1444/386-1351. If you receive the recorded message, please follow the instructions. If you wish to receive a confirmation call, please request it in your message. **You may schedule up to two exams per test date.** Re-tests will not be administered on the same day as the original test; a separate appointment must be made. The test site is located at the Fire Marshal's Office at 220 3rd Ave. S. on the second floor.

Certification Fees and Payment

Seattle Fire Department Certification Fees	
Testing	$407 per examination, required once every three years
Renewal	No charge, however certificates must be renewed annually
Replacement Card	$55 per card

Examinations - $407 per Exam

The cost for each exam is $407 and may be paid by check (payable to the *City of Seattle*) or online at: https://web6.seattle.gov/sfd/Permits. The fee is due at or before the time of the exam and applicants who have not paid will not be allowed to take the exam. If the fee is paid in advance, proof of payment must be brought with the applicant to the test. Advance payment must be associated to a specific testing customer and must be used within 60 days. The fee covers the initial test and if needed, one re-test. The re-test must be taken within 90 days of the original test date. If the re-test is taken after the 90-day period, a new certification exam fee of $407 will be required.

Once the candidate has successfully passing a certification examination and provided evidence of a current state of Washington certification (if required by state law for that certification type), the individual will be certified by the city of Seattle for one year. The certification may be renewed for two subsequent years at no cost to the card holder. Testing and payment are required every three years.

Annual Renewals – No Charge

Certificates will expire one year from the date of test. Card holders may renew their certification for two additional years at no cost by filling out and submitting the Renewal Application for Fire and Life Safety Certification annually. Certificate holders will need to remain familiar with the current fire code and national standards outlined in the SFD Certification Packet at www.seattle.gov/fire/fmo/certification/certification.htm. It is the responsibility of certificate holders to keep their certificate up to date each year. It is a criminal law violation to perform any of the work regulated by Seattle Fire Department Administrative Rule 9.01 without a valid certificate.

Replacement Cards - $55 per Card

A $55 fee will be assessed for each lost or stolen certification card that is replaced. The fee can be paid by check (payable to the *City of Seattle*) or, if you wish to use a credit card for a replacement card, please call us at (206) 386-1450 or make payment in person in our office. Due to information that needs to be validated for issuing replacement cards, we are unable to accept online payments for this service.

Testing Dates and Times Certification tests are administered as follows:

Every Monday and Wednesday, 2:00 p.m.
Every Tuesday, 7:30 a.m.

Tests are not administered on City holidays. Test takers have two hours to complete the test.

Testing Location

Tests are administered at the Seattle Fire Marshal's Office, 220 Third Avenue South, in Seattle near Pioneer Square. The Fire Marshal's Office is on the second floor, above the Foster White Art Gallery.

Identification

Applicants must present picture identification at the test site prior to being issued an exam. Applicants who fail to do so will not be permitted to take the scheduled exam.

State Certification
Please note that a Seattle certification is not a substitute for the state certification, which may also be required. For example, any employee performing inspection and testing work on water-based fire protection sprinkler systems must also hold a current Washington State Certification of Competency to do inspection and testing on sprinkler systems.

Pre-reading
Before you acquire study materials and study you should first read Administrative Rule 9.01 of the Seattle Fire Code. Administrative Rule 9.01 of the Seattle Fire Code contains in-depth information on the certification program, including a list of persons and agencies exempted from the program. A copy of Administrative Rule 9.01 is included in this Certification informational packet. All Seattle Fire Department Administrative Rules can also be viewed online at www.seattle.gov/fire/FMO/firecode/adminRules.htm

General Reference Materials
The following list provides descriptions of the reference materials from which certification test questions are derived. Information about locating the reference materials is also provided. Specific reference material for each certificate type can be found below in the bibliography section of this packet.

2015 Seattle Fire Code
This is a locally amended version of Washington State's amended version of the 2015 International Fire Code. It is available for viewing online at www.seattle.gov/dpd/codesrules/codes/fire/default.htm (or through links from the Seattle Fire Department web site) and may be purchased at both the Seattle Fire Department and the Seattle Department of Construction and Inspections (SDCI). For hard copies of the Seattle codes, contact SDCI's Public Resource Center. The 2015 Seattle Fire Code may also be purchased over the counter at the Seattle Fire Marshal's Office, 220 3rd Avenue South, Floor 2, weekdays from 8 a.m. to 4:30 p.m. The price is $87. Seattle code books may also be purchased on line from the International Code Council (ICC).

2015 Seattle Building Code
This is a locally amended version of the 2015 International Building Code. It is available for viewing online at www.seattle.gov/dpd/codesrules/codes/building/default.htm and may be purchased from SDCI. For hard copies of the Seattle codes, contact SDCI's Public Resource Center at (206) 684-8467, 5th Avenue, Floor 20, Seattle.

2014 Seattle Electrical Code
This is a locally amended version of the 2014 National Electrical Code, published by the National Fire Protection Association (www.nfpa.org or 1-800-344-3555). To view the 2014 National Electrical Code and related Seattle amendments online, see www.nfpa.org. For more information on obtaining paper copies of the local amendments, contact SDCI at (206) 684-8467. Copies of the above codes may also be available from local book retailers.

Seattle Fire Department – Administrative Rulings
SFD Administrative Rulings are available on the web at www.seattle.gov/fire/FMO/firecode/adminRules.htm

Seattle Fire Department – Client Assistance Memoranda (CAMs)
SFD CAMs are available on the web at www.seattle.gov/fire/fmo/firecode/cam/default.htm and can also be obtained from the Certification Unit by email, fax, or U.S. mail by calling (206) 386-1351.

Seattle Department of Construction and Inspections – Tips
SDCI Tips are available on the web at: http://web1.seattle.gov/dpd/cams/CamList.aspx and at the SDCI Public Resource Center, (206) 684-8467, 700 Fifth Avenue, Floor 20, Seattle.

Seattle Department of Construction and Inspections – Director's Rules
Director's Rules can be obtained from the Certification Unit by email, fax, or U.S. mail by calling (206) 386-1351. Director's Rules are also available on the web at: http://web1.seattle.gov/dpd/dirrulesviewer and from the Department of Construction and Inspections Public Resource Center, (206) 684-8467, 700 5th Avenue, Floor 20, Seattle.

National Fire Protection Association Standards
NFPA Standards can be viewed online and/or purchased through their website www.nfpa.org, or by calling the NFPA at 1(800) 344-3555. Copies may also be available from local book retailers.

Links to Other Resources

The following is a list of web sites where additional information pertaining to fire and life safety issues may be found.

www.firesprinkler.org/
www.nfsa.org
www.nfpa.org/
www.nicet.org/
www.fema.gov/
www.usfa.fema.gov/
www.afaa.org
www.alarm.org/
www.ansi.org/
www.astm.org/
www.ashrae.org/
www.wsp.wa.gov/fire/licensing.htm

Certification Information Packet

Certification Exam Bibliographies

AUTOMATIC SPRINKLER SYSTEMS

AS-ITT(S) – Inspection, testing, and maintenance of water based fire protection systems, State Level Inspection Testing Technician Certification.

AS-2(S) – Installation, inspection, testing and maintenance of automatic sprinkler systems and standpipes, State Level II (Group R – single or dual family residential buildings up to and including 4 stories and Residential Sprinkler Fitters).

AS-3(S) – Installation, inspection, testing, and maintenance of automatic sprinkler systems and standpipes, State Level III (all buildings and Journey Level Sprinkler Fitters).

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 13, 13R, 25, 307

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.02, 9.03, 9.04
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm

Chapters:

1 – Sections: 101, 102.1, 102.3, 102.8, 103.1,105, 106, 107, 108,109, 110, 111
2 – Sections: 201, 202
9 – Sections: 901, 902,903, 904, 905
90, **91**, **92**
93 (for AS-ITT(S) and AS-3(S) applicants only)
94 – Sections: 9405.2
Appendix B & I

- **Seattle Building Code (2015):**
www.seattle.gov/dpd/codesrules/codes/building/default.htm

Chapters:

4 – Sections: 403.3, 403.3.1, 403.3.1.1, 404.3, 407.6, 410.7,411.4, 901, 902, 903, 904

- **Seattle Fire Fee Ordinance:**

Seattle Municipal Code Sections: 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

ENGINEERED/PRE-ENGINEERED SYSTEMS

FOAM SYSTEMS

E-1 – Installation, inspection, testing, and maintenance of foam fire extinguishing systems; must also maintain AS-3(S) certification.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 11, 16, 25, 72

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.02
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
  1 – Sections: 101.3, 101.4,103.1,103.2, 105, 106, 107, 109, 110, 111
  2 – Sections: 201, 202
  9 – Sections: 904, 904.7, 904.7.1

- **Seattle Fire Fee Ordinance:**
Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

CARBON DIOXIDE SYSTEMS

E-2 – Installation, inspection, testing, and maintenance of carbon dioxide fire extinguishing systems.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 12, 12A, 72

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.02
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
  1 – Sections: 101, 103.1, 103.3, 103.4, 105, 106, 107, 109, 110, 111
  2 – Sections: 201, 202
  9 – Sections: 904, 904.8, 904.8.1, 904.8.2
  Appendix B

- **Seattle Fire Fee Ordinance:**
  Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
  Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

HALON SYSTEMS AND REPLACEMENT AGENTS

E-3 – Installation, inspection, testing, and maintenance of engineered, clean agent or replacement agent fire extinguishing systems.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 12A, 72, 2001

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.03, 9.04
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
  1 – Sections: 101.3, 101.4,103.1, 103.3, 103.4, 105, 106, 107, 109, 110, 111
  2 – Sections: 201, 202
  9 – Sections: 904, 904.1.1, 904.9, 904.10, 904.10.1, 904.10.2, 9094.10.3, 904.11

- **Seattle Fire Fee Ordinance:**
  Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
  Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

DRY/ WET CHEMICAL SYSTEMS

E-4 – Installation, inspection, testing, and maintenance of engineered dry/wet chemical fire extinguishing systems

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 17, 17A, 72

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.02
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
  1 – Sections: 101.2, 101.4, 103.2, 103.3,103.4, 105,106, 107, 109, 110, 111
  2 – Sections: 201, 202
  9 – Sections: 904, 904.5.1, 904.5.2

- **Seattle Fire Fee Ordinance:**
Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

- **Seattle Department of Construction and Inspections TIP:**
TIP 418: "Users' Guide to Achieving a Fire-Rated Shaft with YYET Products".
http://web1.seattle.gov/DPD/CAMs/CamList.aspx?cs=400

EMERGENCY GENERATORS

EG-1 – Installation (non-electrical), inspection, testing, and maintenance of emergency generators.

EG-ITM – Inspection, testing, and maintenance of emergency generators.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 70 (2014), 110 (2013)
subject to the changes found in the Seattle Amendments to the National Electrical Code (Seattle Ordinance - 124593) http://clerk.ci.seattle.wa.us/~scripts/nph-brs.exe?s1=&s2=&s3=&s4=&s5=electrical+code&Sect4=AND&l=20&Sect1=IMAGE&Sect2=THESON&Sect3=PLURON&Sect5=CBOR1&Sect6=HITOFF&d=CBOR&p=1&u=/~public/cbor1.htm&r=1&f=G

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.02
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
  1 – Sections: 101.2, 101.4,103.1, 103.3, 103.4, 105, 106, 107, 109, 110, 111
  2 – Sections: 201, 202
  6 – Sections: 604
  93 – Sections: 9307

- **Seattle Building Code (2015):**
www.seattle.gov/dpd/codesrules/codes/building/default.htm
Chapters:
  27 – Sections: 2702

- **Seattle Electrical Code (2014):**
  Article 700, 701

- **Seattle Fire Fee Ordinance:**
  Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
  Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

FIRE ALARM SYSTEMS

FA-1 – Inspection, testing, and maintenance of automatic fire alarm systems in any type of building.

FA-ITM – Inspection, testing (except “acceptance testing”), and maintenance of automatic fire alarm systems.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 72

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.02, 9.04
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015)**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
1 – Sections: 101,103.1, 103.3, 103.4, 105, 106, 107, 109, 110, 111
2 – Sections: 201, 202
9 – Sections: 907, 908
90
93 – Sections: 9302.4, 9302.5, 9306
Appendix B & I

- **Seattle Building Code:** (**2015**)
www.seattle.gov/dpd/codesrules/codes/building/default.htm
Chapter:
9 – Sections: 907, 908, 1105.4.9 (Washington State Amendment)

- **Seattle Fire Fee Ordinance:**
Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

FIRE EXTINGUISHERS

FEX-1 – All activities relating to portable fire extinguishers, including those listed in type FEX-2, FEX-3 and FEX-4.

FEX-2 – Installation, inspection, testing, maintenance, charging, and recharging of portable fire extinguishers.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 10
- **Seattle Fire Code (2015)**

www.seattle.gov/dpd/codesrules/codes/fire/default.htm

Chapters:

1 – Sections: 101.2, 101.4,103.1, 103.3, 103.4, 105
2 – Sections: 201
9 – Sections: 906
20 – Sections: 2005
Appendix B

- **Seattle Municipal Code:**

Sections: 22.600.00 and 22.602.045 http://clerk.ci.seattle.wa.us/~public/code1.htm

FEX-3 – Hydrostatic testing of fire extinguisher cylinders.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 10
- **Seattle Fire Code (2015)**

www.seattle.gov/dpd/codesrules/codes/fire/default.htm

Chapters:

1 – Sections: 101.2, 101.4,103.1, 103.3, 104.1, 105.7, 106, 109, 110, 111
2 – Sections: 201
9 – Sections: 906
20 – Sections: 2005
Appendix B

- **Seattle Municipal Code:**

Sections: 22.600.00 and 22.602.045 http://clerk.ci.seattle.wa.us/~public/code1.htm

FEX-4 – Annual external examination of CO2 or stored pressure fire extinguishers equipped with pressure indicators or gauges.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 10
- **Seattle Fire Code (2015)**

www.seattle.gov/dpd/codesrules/codes/fire/default.htm

Chapters:

1 – Sections: 101.2, 101.4,103.1, 103.4, 104.1, 106, 109,
2 – Sections: 201
9 – Sections: 906
20 – Sections: 2005
Appendix B

- **Seattle Fire Fee Ordinance:**

Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

FIRE PUMPS

FP-1 – Installation (non-electrical), inspection, testing, and maintenance of fire pumps and controllers.

FP-ITM – Inspection, testing, and maintenance of fire pumps and controllers.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 20, 25

- **Seattle Fire Department Administrative Ruling:** 9.01, 9.02.
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015)**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
1 – Sections: 101, 103.1, 103.3, 103.3, 105, 106, 107, 109, 110, 111
2 – Sections: 201, 202
9 – Sections: 913
91
92
93
Appendix B

- **Seattle Fire Fee Ordinance:**
Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

SMOKE CONTROL

SC-1 – Installation, inspection, testing, and maintenance of smoke control systems.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 90A, 92A, 204

- **ASHRAE – Design of Smoke Control Systems**

- **Seattle Fire Code (2015):**

www.seattle.gov/dpd/codesrules/codes/fire/default.htm

Chapters:

1 – Sections: 101,103.1, 103.3, 105, 106, 107, 109, 110, 111
2 – Sections: 201,202
9 – Sections: 909, 910
93
Appendix B

- **Seattle Building Code (2015):**

www.seattle.gov/dpd/codesrules/codes/building/default.htm

Chapters:

4 – Sections: 404, 404.5, 405.5, 405.5.1, 405.5.2
9 – Sections: 909, 910

- **Seattle Fire Fee Ordinance:**

Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**

Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

SC-ITM– Inspection, testing and maintenance of smoke control systems

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 92, 204

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm
Chapters:
1 – Sections: 101,103.1, 103.3, 105, 106, 107, 109, 110, 111
2 – Sections: 201, 202
9 – Sections: 909, 910
93
Appendix B

- **Seattle Building Code (2015):**
www.seattle.gov/dpd/codesrules/codes/building/default.htm
Chapters:
4 – Sections: 403.1, 405.5, 405.5.1, 405.5.2
9 – Sections: 909, 910

- **Seattle Fire Fee Ordinance:**
Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

STANDPIPES

(This category only includes systems that are designed to discharge water)

STP-ITM – Inspection, testing, and maintenance of standpipe systems.

REFERENCE MATERIAL

- **National Fire Protection Association Standards:** 14, 25

- **Seattle Fire Department Administrative Ruling:** 9.03,
www.seattle.gov/fire/FMO/firecode/adminRules.htm

- **Seattle Fire Code (2015):**
www.seattle.gov/dpd/codesrules/codes/fire/default.htm

Chapters:

1 – Sections: 101,103.1, 103.3, 105, 106, 107, 109, 110, 111
2 – Sections: 201,202
9 – Sections: 905
93
Appendices B

- **Seattle Building Code (2015):**
www.seattle.gov/dpd/codesrules/codes/building/default.htm

Chapters:

4 – Sections: 410.7
9 – Sections: 905, 905.4

- **Seattle Fire Fee Ordinance:**
Seattle Municipal Code Sections: 22.602.020 and 22.602.045
https://www.municode.com/library/wa/seattle/codes/municipal_code?searchRequest=%7B%22searchText%22:%2222.602.020%22,%22pageNum%22:1,%22resultsPerPage%22:25,%22booleanSearch%22:false,%22stemming%22:true,%22fuzzy%22:false,%22synonym%22:false,%22contentTypes%22:%5B%22CODES%22%5D,%22productIds%22:%5B%5D%7D&nodeId=TIT22BUCOCO_SUBTITLE_VIFICO_CH22.602FICOPEINFE_22.602.020PAFE

- **Seattle Ordinance Adopting 2015 Seattle Fire Code:**
Number 125138 clerk.ci.seattle.wa.us/~public/CBOR1.htm

Certification Information Packet

Reprints of SFD Administrative Rules

SEATTLE FIRE DEPARTMENT	**Administrative Rule 9.01.17**

SUBJECT:	EFFECTIVE DATE:
SEATTLE FIRE DEPARTMENT CERTIFICATES OF COMPETENCY FOR INSTALLING, INSPECTING, TESTING AND MAINTAINING FIRE PROTECTION SYSTEMS	April 20, 2017
REFERENCES: Seattle Fire Code Administrative Rule 9.02.17 Inspection, Testing and Maintenance Requirements for Fire Protection Systems NFPA Standards Washington Administrative Code (WAC) 212.80 Revised Code of Washington (RCW) 19.28	SUPERSEDES: Administrative Rule 9.01.15,March 19, 2015.
	FCAB REVIEW DATE: March 21, 2017
NOTICE: Notice: Administrative Rules are established per 2015 SFC Section 104.1, and they are subject to the Administrative Section 104.8 Modifications, Sections 104.9 Alternate Materials and Methods, and Section 108.1 Appeals.	APPROVED:  CHARLES CORDOVA, FIRE MARSHAL

Section 1. INTENT

The intent of this rule is to ensure that fire protection systems are installed, inspected, tested, or maintained by individuals who have demonstrated a basic knowledge to perform such work in accordance with the Seattle Fire Code (SFC), Seattle Fire Department (SFD) Administrative Rules, and nationally recognized standards.

Section 2. SCOPE

This rule shall apply to all individuals engaged in installing, programming, inspecting, testing or maintaining fire protection systems in the City of Seattle unless specifically exempted from this rule by the exceptions contained in Section 3.

Section 3. EXCEPTIONS

The following are exempt from the requirements in this Administrative Rule:

(a) For aircraft, vehicles or vessels, any businesses, firms or persons engaged exclusively in the business of installing, testing or maintaining fire protection systems on such aircraft, vehicles or vessels.

(b) Members of the SFD acting in their official capacity engaged in servicing fire department equipment, work performed on fire protection systems in connection with emergency responses, or of fire protection systems at any premises for compliance with the SFC, SFD Administrative Rules or nationally recognized standards.

(c) Federal government employees engaged in installing, testing or maintaining fire protection and life safety systems and equipment owned by the federal government.

(d) State government employees engaged in installing, testing or maintaining fire protection and life safety systems and equipment installed for the protection of public rights of way.

(e) A registered professional engineer in the state of Washington acting solely in professional capacity.

(f) Insurance Rating Associations and building owners engaged in testing and inspecting fire protection systems when such inspecting and testing is not required by the SFC, SFD Administrative Rule, or nationally recognized standards.

(g) Any individual who services only his or her own fire extinguisher(s) for personal use, provided such extinguisher(s) are not required by SFC, SFD Administrative Rule, or nationally recognized standards.

(h) Individuals testing or maintaining fire protection systems installed in dwellings regulated by the Seattle Residential Code (SRC). However, see WAC 212.80 for State of Washington requirements.

(i) Building owners, other responsible parties or their authorized agents operating fire protection systems for the purpose of conducting emergency evacuation drills required by the SFC.

(j) When performing work regulated under Chapter 19.28 RCW, certified master electricians, journeyman electricians, specialty electricians or properly supervised trainees allowed to perform electrical installation work under Chapter 19.28 RCW;

Provided:

When work is being performed that involves electrical work regulated under Chapter 19.28 RCW and programming or testing of fire alarm systems as required by the fire code official, the individual:

a) Must comply with this rule and be a State of Washington certified electrician for the work being performed; or
b) Must be a State of Washington certified electrician who is directly supervised by an individual certified by the fire code official during the work.

Section 4. DEFINITIONS

For the purposes of this rule the following words and terms have the meanings indicated below:

Certificate of Competency. A document issued by the fire code official to a person who has passed the prescribed examination, and has met the other requirements for certification, which grants conditional permission to perform the acts for which a certificate has been issued.

Fire Protection Systems. Approved devices, equipment and systems or combinations of systemsused to detect a fire, activate an alarm, or extinguish or control a fire, control or manage smoke and products of a fire or any combination thereof.

Inspection. A visual examination of a fire protection system, or portion of the system, to verify that the system appears to be in operating condition, is free from physical damage, and complies with the SFC and applicable statutes and regulations.

Maintenance. Work, required to keep fire protection systems operable or make repairs in accordance with the SFC and applicable statutes and regulations.. The term also means the disassembly of an extinguisher, fire protection system and a complete check of all working parts and all parts, which have a bearing on the performance of the system to insure integrity.

Testing. A procedure used to determine the status of a fire protection system to verify it is operating as intended by conducting periodic checks on fire protection systems such as water flow tests, fire pump tests, shaft pressurization tests, fire alarm tests etc. The term “testing” also includes acceptance testing and reacceptance testing.

Section 5. CERTIFICATE OF COMPETENCY REQUIRED

No individual shall engage in installing, programming, inspection, testing or maintaining fire protection systems unless they have obtained a certificate of competency from the fire code official or are specifically exempted from this rule.

A SFD certificate of competency is issued to an individual who has passed the required examination and met other requirements. The required examination must be passed every three (3) years. Certificates of competency shall remain valid for a period of time not to exceed one (1) year unless suspended or revoked by the fire code official.A person shall not be required to retake a certification examination, and obtain a new certificate of competency, upon changing employers.

The SFD may change the content of certification examination questions to reflect changes in applicable standards and industry practice. An SFD certificate of competency is not a substitute for, nor does it exempt individuals from, any State of Washington or federal certification, licensing, or other requirements not under the jurisdiction of the SFD. When a State of Washington Certificate of Competency is required, the SFD certificate of competency is only valid if the State of Washington Certificate of Competency is valid at the time the SFD certificate is issued or renewed.

The fire code official is authorized to recognize certificates or licenses issued by the State of Washington Fire Marshal, other fire departments or similar authorities, provided that such certificates or licenses establish qualifications of the holder in a manner similar to this rule and to the satisfaction of the fire code official.

Certificate of competency holders shall be required to carry their SFD certificate at all times when performing work on fire protection and life safety systems and equipment, and to show this certificate of competency card when requested to do so by a SFD representative. Certificates of competency are the property of the SFD and shall be surrendered upon demand of a SFD representative.

Certificate of competency holders shall also produce a valid Washington State driver's license and State of Washington Certificate of Competency Certification or other form of picture identification acceptable to the fire code official when requested to do so by a SFD representative in the field.

Individuals enrolled in a fire sprinkler apprenticeship program approved by the Washington State Fire Marshal may install, program, inspect, test or maintain fire sprinkler systems and equipment, provided that such work is conducted in the presence and under the direct supervision of another employee who holds a valid certificate for the type of work being performed. The ratio of apprentices to journey-level workers may not exceed one apprentice per SFD cerfified journey-level worker.

Persons working on fire protection systems while enrolled in an approved apprenticeship program shall be required to produce their apprenticeship card or other written evidence of enrollment in an approved apprenticeship program, as well as a Washington State driver's license or other form of picture identification, when requested to do so by a Fire Department representative.

The fire code official shall maintain a list of all persons currently certified to perform work on fire protection systems.

Section 6. TYPES OF CERTIFICATES

A certificate of competency to perform work on fire protection systems must be obtained from the SFD before an individual may perform the types of work on fire protection systems specified for each certificate. When a State of Washington Certificate of Competency is required, it must be obtained prior to being issued a SFD certificate of competency. Types of certificates of competency that are currently required shall be published by the fire code official in this SFD Administrative Rule and are listed below. The fire code official is authorized to add to, delete from or alter the types of certificates of competency required under the SFC.

If an individual holds a valid certificate of competency as of the effective date of this ordinance that authorizes specific work covered by a new type of certificate of competency , that individual shall not be required to obtain the new certificate of competency until his/her existing certificate of competency expires.

Type AS-ITT (S)	Inspection, testing, and maintenance of water based fire protection systems State Level ITT Design Certification .
Type AS-2 (S)	Installation , inspection, testing, and maintenance of automatic sprinkler systems and all standpipe systems, State Level 2 (Group R Buildings up to four stories and Residential Sprinkler Fitters).
Type AS-3 (S)	Installation, inspection, testing, and maintenance of automatic sprinkler systems and all standpipe systems, State Level 3 (all buildings and journey Level Sprinkler Fitters).
Type E-1	Installation, inspection, testing, and maintenance of foam fire extinguishing systems; must also maintain AS-3 (S) certification.
Type E-2	Installation, inspection, testing, and maintenance of carbon dioxide fire extinguishing systems.

Type E-3	Installation, inspection, testing, and maintenance engineered, clean agent or replacement agent fire extinguishing systems.
Type E-4	Installation, inspection, testing, and maintenance and testing of dry/wet chemical fire extinguishing systems.
Type EG-1	Installation (non-electrical), inspection, testing and maintenance of emergency generators.
Type EG-ITM	Inspection, testing, and maintenance of emergency generators.
Type FA-1	Inspection, testing, maintenance, and programming of automatic fire alarm systems in any building.
Type FA-ITM	Inspection, testing (except “acceptance testing”), and maintenance of automatic fire alarm systems.
Type FP-1	Installation (non-electrical), inspection, testing, and maintenance of fire pumps and controllers.
Type FP-ITM	Inspection, testing, and maintenance of fire pumps and controllers.
Type FEX-1	All activities relating to portable fire extinguishers including those listed in Types FEX-2, FEX-3, and FEX-4.
Type FEX-2	Installation, inspection, testing, maintenance, charging, and recharging of portable fire extinguishers.
Type FEX-3	Hydrostatic testing of fire extinguisher cylinders.
Type FEX-4	Annual external examination of CO_2 or stored pressure fire extinguishers equipped with pressure indicators or gauges.
Type SC-1	Installation, inspection, testing, and maintenance of smoke control systems.
Type SC-ITM	Inspection, testing, and maintenance of smoke control systems.
Type STP-ITM	Inspection, testing and maintenance of standpipe systems.

Section 7. QUALIFICATIONS AND EXAMINATIONS FOR CERTIFICATES OF COMPETENCY

Applicants may be required to submit evidence that they possess necessary license, tools, or test equipment required for the type of work to be performed.

Applicants for a SFD certificate of competency must provide current personal identification in the form of a Washington State driver’s license or another form of picture identification acceptable to the fire code official. When a State of Washington Certificate of Competency is required for the work to be performed under the SFD certificate, proof of a valid State of Washington Certificate of Competency shall be provided.

All applicants for a SFD certificate of competency shall pass a written examination given by the fire code official. Such examinations shall be designed to test the applicant's knowledge to hold the type of certificate for which application has been made. Practical tests or demonstrations may be required in addition to the written examination.

A list of suggested information resources to prepare for the examinations for certificates of competency shall be provided by the fire code official.

Section 8. SERVICE LABEL REQUIREMENTS

When performing installation, inspection, testing, programming, or maintenance, the name of certifying firm, firm address, firm phone number, date of work, signature and certificate of competency number of the technician performing the work shall be placed on the service tag or label. The service tag or label will be of the appropriate color; white, yellow, or red as required by Administrative Rule 9.02.14 Inspection, Testing and Maintenance Requirements for Fire Protection Systems.

No person shall remove a service tag or label from, or place a service tag or label on, a fire protection system except when installation, testing or maintenance is performed. A new service tag or label shall be attached whenever testing or maintenance is performed.

No person shall deface, modify or alter any service tag or label attached to or required to be attached to any fire protection system.

Section 9. DENIAL, REVOCATION AND SUSPENSION OF CERTIFICATES OF COMPETENCY

The fire code official may refuse to issue, renew, or may suspend or revoke any certificate of competency if he determines that an applicant for or holder of a certificate of competency has:

1. Obtained or attempted to obtain a certificate of competency by fraud or misrepresentation.
2. Has installed, tested, programmed or maintained a fire protection system in violation of this Code, Administrative Rule, or applicable standard.
3. The applicant for a certificate of competency does not possess the qualifications to conduct the operation for which application is made as demonstrated by written and/or practical examination, or has not affirmed maintenance of competency as part of the annual renewal process.
4. The applicant for a certificate of competency does not possess the proper facilities to conduct operations for which application is made
5. The applicant does not or no longer has required valid certifications, when applicable, under the laws of the State of Washington.

Individuals whose certificates of competency have been denied, suspended or revoked shall be so notified in writing and may request a hearing by the fire code official in accordance with Section 108 of the Seattle Fire Code. After such hearing, the fire code official shall consider the facts and circumstances surrounding the case and shall render his/her decision in writing. The decision of the fire code official shall be final with regard to whether or not the certificate of competency shall be denied, suspended or revoked.

SEATTLE FIRE DEPARTMENT

Administrative Rule 9.02.17

SUBJECT:	EFFECTIVE DATE:
INSPECTION, TESTING, MAINTENANCE AND REPORTING REQUIREMENTS FOR FIRE PROTECTION SYSTEMS	April 20, 2017
REFERENCES: Seattle Fire Code NFPA 10, 11, 12, 12A, 15, 16, 17, 17A, 25, 72, 92A, and 92B	SUPERSEDES: Administrative Rule 9.02.14, April 4, 2014.
	FCAB REVIEW DATE: March 21, 2017
NOTICE: Notice: Administrative Rules are established per Seattle Fire Code Section 104.1, and they are subject to the Administrative Sections 104.8 Modifications, Section 104.9 Alternate Materials and Methods, and Section 108.1 Appeals.	APPROVED:  CHARLES CORDOVA, FIRE MARSHAL

Section 1. SCOPE

This rule shall apply to inspection, testing and maintenance requirements for fire protection systems and equipment as defined in the Seattle Fire Code, and any other systems as set forth by the fire code official.

Exceptions:
1. NFPA 13D sprinkler systems.
2. Single and multiple station smoke alarms.
3. Fire hydrants and fire service mains owned by the city of Seattle.

Section 2. DEFINITIONS

For the purposes of this rule the following words and terms have the meanings indicated below:

Certified Technician. A technician currently certified by the Seattle Fire Department in accordance with Seattle Fire Department Administrative Rule 9.01.13, and any future revisions of this rule adopted by the fire code official.

Deficiency. A condition in which a system or portion thereof is damaged, inoperable, or in need of service, but does not rise to the level of an impairment.

Emergency Impairment. An abnormal condition where a system, component, or function is out of service due to an unexpected deficiency.

Impairment. A condition where a fire protection system or unit or portion thereof is out of service, and the condition can result in the fire protection system or unit not functioning in a fire event.

Impairment Coordinator. The person responsible for the maintenance of a particular fire protection system.

Impairment Tag. A red tag used to indicate that a system, or portion thereof, has been removed from service

Planned Impairment. An abnormal condition where a system, component, or function is out of service due to work that has been planned in advance.

Service Tag and Label. A white or yellow tag or label with black type formatted in accordance with this rule used for the purpose of indicating the status of life safety system.

Test Report. A complete record of a fire protection system test, including problems found and any corrections made.

Testing. A procedure used to determine the status of a system to verify it is operating as intended by conducting periodic checks on fire protection systems such as waterflow tests, fire pump tests, shaft pressurization tests, fire alarm tests etc. The term “testing” includes acceptance testing, reacceptance testing and confidence testing.

Section 3. INSPECTION, TESTING AND MAINTENANCE REQUIREMENTS

All fire protection systems listed in Table 1, below, are required to be inspected, tested and maintained in accordance with applicable NFPA standards by individuals who have obtained the proper certificate from the fire code official in accordance with Administrative Rule 9.01.13, *Certification for Installing, Maintaining and Testing Life Safety Systems and Equipment*, and any future revision of this rule adopted by the fire code official.

> **Exception**: Although national standards generally require standpipe testing every five years, in Seattle marina standpipes are required to be tested annually.

An anniversary date will be established one year from the date of the initial system acceptance test for all new fire protection systems. The anniversary date shall remain fixed and establish the due date each year for subsequent tests.

> **Exception**: Non-marina standpipes shall have an anniversary date established five years from the date of initial acceptance. The anniversary date shall remain fixed and establish the due date every fifth year for subsequent tests.

Fire alarm systems in high rise buildings may have one fourth of the entire system tested quarterly so that the entire system is tested annually.

The building owner is responsible for ensuring the tests are performed and correcting deficiencies in a timely manner.

Section 4. TEST RECORDS AND TEST REPORTS

A record of all fire protection system inspections, testing and maintenance must be maintained on the premises for a minimum of three years. Records may be electronic or printed documents. A copy of all fire protection systems test reports is required to be submitted to the Seattle Fire Department per Section 5 of this rule.

Section 5. MANDATORY PROCESS FOR SUBMITTING TEST REPORTS TO THE SEATTLE FIRE DEPARTMENT

Effective July 1, 2017, the following process is mandatory for submitting test reports to the Seattle Fire Department.

1. All systems test reports for tests of fire protection systems conducted within Seattle as included in Table 1 are required to be sent to the Seattle Fire Department electronically via the Seattle Fire Department's third party vendor who will collect, organize, categorize, and provide to the Seattle Fire Department.

2. Certified technicians are required to register and utilize the third party vendor's single point repository service. Companies employing certified technicians are required to set up an account at the company level so that certified technicians are registered under the account of the companies employing them.

3. The company employing the certified technician shall be responsible for paying the systems test report filing fee as established in Seattle Municipal Code 22.602.090.

4. All completed test reports as listed in Table 1 shall be completely entered into to the third party vendor's website here: www.thecomplianceengine.com, using the Seattle-standard system test report forms that are incorporated into the third party vendor's website and also available for review on the Seattle Fire Department web site at http://www.seattle.gov/fire/fmo/confidence testing/ctforms. The company employing the certified technician shall ensure that all test reports are submitted within the time frames established by the section 6 of this rule, so that the Seattle Fire Department can receive timely system test report information and confirm compliance.

5. When reporting on the tests required in table 1 below, a single report can contain test documentation for multiple fire protection systems of the same type. For example, a single sprinkler report can contain information about five sprinklers in the same premises. If deficiencies are identified, the location of each deficient system and the nature of the deficiency in that system shall be clearly identified.

6. After deficiencies are repaired, a report documenting that the system functions with no deficiencies (a "clean test report" or a "white tagged report") shall be submitted. If more than one deficient system was identified on a single report as described in item 5 above, the certified technician or the company employing them has two reporting options:

    a. Submit one clean test report documenting that each deficient system identified on the original report has been corrected. This option is most useful when all the corrections are completed on a very similar timeline.

    b. Submit information about repairs to each deficient system identified on the original report as repairs are completed, rather than waiting until all deficiencies have been corrected. In this case, the third party vendor's application will not consider the original report to be resolved until each of the deficient systems has been updated as corrected. This option is most useful when the system repairs are not able to be completed on similar timelines. In this case, the per report fee as specified in item 3 is only charged once all the deficiencies listed on the original report have been reported as corrected. In other words, multiple correction reports may be filed related to deficiencies contained

in the original report, however only one reporting fee will be charged, at the point when all the deficiencies have been corrected.

NFPA standards have additional inspection requirements beyond annual testing and the building owner shall be responsible to continue performing these inspections and maintaining records on the premises. These testing and inspection results are not required to be submitted to the Seattle Fire Department. The building owner is responsible for ensuring that correctly certified individuals are conducting the tests.

Table 1: Required Systems Test Reports and Submittal Frequency

Fire Protection System Type	Code/Standard	Frequency
Alternative Extinguishing Systems (CO^2, clean agent, dry chem)	Seattle Fire Code 901.6	Annual
Automatic Sprinkler Systems - Dry	Seattle Fire Code 901.6	Annual
Automatic Sprinkler Systems - Wet	Seattle Fire Code 901.6	Annual
Emergency Alarm Systems (Haz Mat)	Seattle Fire Code 5003.2.9	Annual
Emergency Generators	Seattle Fire Code 604.3	Annual
Fire Alarm Systems	Seattle Fire Code 901.6	Annual
Fire Escapes	Seattle Fire Code 1104.16.5.1 SFD Administrative Rule 11.01.14	Every five years
Fire Pumps	Seattle Fire Code 913.5 NFPA 25 Chapter 8	Annual
Rangehood	Seattle Fire Code 901.6	Every six months
Smoke Control Systems	Seattle Fire Code 901.6	Annual
Standpipe Systems	Seattle Fire Code 901.6	Every five years
Standpipe Systems – Marinas	Seattle Fire Code 901.6	Annual

Section 6. MARKING FIRE PROTECTION SYSTEMS

A service label or tag conforming to this section shall be securely attached to each fire protection system or item of fire protection equipment at the time of initial acceptance testing, and after all subsequent inspection, testing and maintenance. The following information shall be printed on all yellow or white service tags or labels:

1. The words "**DO NOT REMOVE BY ORDER OF THE FIRE MARSHAL**."
2. Name, address and telephone number of the business or firm performing the testing.
3. Date that work was performed.
4. Printed name of person performing work.
5. Seattle Fire Department certification number of person performing work.
6. Description of work performed (for white tags), or description of any deficiencies found (for yellow tags).

White Tag – No Deficiencies
Systems with no deficiencies shall be tagged with a white service tag or label. The system test report shall be added to the third party vendor's website so that the Seattle Fire Department can review the reports **within 7 calendar days of the test**.

> **Note:** If the system has any deficiencies listed on the test report, then it cannot be certified as a white tag.

Yellow Tag – System Has Deficiencies
Systems that are functioning, but have deficiencies, shall be tagged with a yellow service tag or label and the system test report shall be added to the third party vendor's website so that the Seattle Fire Department can review the reports **within 7 calendar days of the test**.

Red Tag – Impaired System/System Out of Service
Fire protection system(s) that are impaired for any length of time shall be tagged with a red impairment tag and the system test report shall be added to the third party vendor's website so that the Seattle Fire Department can review the reports **before the end of the day of the test.**

> **Note:** If a planned or emergency impairment is anticipated to take a system out of service for more than eight hours, **in addition to submitting a test report to third party vendor's website, the Seattle Fire Department must be also notified in accordance with Administrative Rule 9.06.14** and any future revisions adopted by the fire code official.

Formats for Tags or Labels
The tag or label shall be of the self-adhesive type or the wire-hanging type. In addition, for red tags, the tag or label shall be clearly visible, weather resistant, and of sufficient size (typically 4 inches x 6 inches). The following formats shall be used for all service tags and labels:

<table>
<tr><td colspan="4">NO DEFICIENCIES</td></tr>
<tr><td rowspan="6">DO NOT REMOVE

By Order of the Fire Marshal</td><td>Year</td><td>Month</td><td>Next Due Date</td></tr>
<tr><td colspan="3">Testing Firm</td></tr>
<tr><td colspan="3">Address</td></tr>
<tr><td colspan="3">Phone</td></tr>
<tr><td colspan="3">Serviced by</td></tr>
<tr><td colspan="3">Seattle Fire Dept. Certificate No.</td></tr>
<tr><td colspan="4">Description of work</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td colspan="4"></td></tr>
</table>

SYSTEM DEFICIENCIES			
DO NOT REMOVE By Order of the Fire Marshal	Year	Month	Next Due Date
	Testing Firm		
	Address		
	Phone		
	Serviced by		
	Seattle Fire Dept. Certificate No.		
Description of deficiencies			

IMPAIRED SYSTEM			
DO NOT REMOVE By Order of the Fire Marshal	Date and Time Impairment Began	Anticipated Date and Time System Will Be Returned to Service	Impairment Type ☐ Planned ☐ Emergency
	Testing Firm		
	Address		
	Phone		
	Serviced by		
	Seattle Fire Dept. Certificate No.		
	Impairment Coordinator		
Description of impairment:			

Section 7. LOCATION OF SYSTEM TAGS

Table 2 on the following page lists the location for placement of systems tags for non-impaired systems (yellow and white tags) and impaired systems (red tags).

Table 2: Location of System Tags

Fire Protection System Type	Location of White and Yellow System Tags	Location of Red Impairment Tags
Alternative Extinguishing Systems (CO^2, clean agent, dry chem)	On the agent supply tank or pull device	Same as White/Yellow
Automatic Sprinkler Systems	On or adjacent to the sprinkler control valve	Same as White/Yellow, and at each fire department connection (FDC)
Emergency Alarm Systems (Haz Mat)	In a readily viewable location	Same as White/Yellow
Emergency Responder Radio Enhancement Systems	Fire alarm control panel	Same as White/Yellow
Emergency Generators Required by Fire Code	At the generator and/or FCC	Same as White/Yellow
Fire Alarm Systems	Fire alarm control panel	Same as White/Yellow, and at Fire Command Center (FCC) if FCC present
Fire Pumps	On the pump controller	Same as White/Yellow, and at Fire Command Center (FCC) if FCC present
Portable Fire Extinguishers	On the control valve of the extinguisher or cylinder	Replace Fire Extinguisher
Rangehood	Control valve of extinguisher or cylinder	Same as White/Yellow
Smoke Control Systems	On the manual control panel, or fire alarm control panel if no smoke control panel is installed	Same as White/Yellow, and at Fire Command Center (FCC) if FCC present
Standpipe Systems	On or adjacent to the lowest outlet	Same as White/Yellow, and at each fire department connection (FDC)
Standpipe Systems – Marinas	On or adjacent to one fire department connection	At each fire department connection (FDC) where multiple connections are present

Section 8. NOTIFICATION REQUIREMENTS FOR IMPAIRMENTS

If a planned or emergency impairment is anticipated to take a system out of service for more than eight hours, the Seattle Fire Department must be notified in accordance with Administrative Rule 9.04.17 and any future revisions adopted by the fire code official.

SEATTLE FIRE DEPARTMENT	**Administrative Rule 9.03.17**

SUBJECT: **AUTOMATIC SPRINKLER AND STANDPIPE SYSTEMS**	EFFECTIVE DATE: April 20, 2017
REFERENCES: SFC Chapter 9 NFPA 13 NFPA 13R NFPA 13D NFPA 14	SUPERSEDES: Administrative Rule 9.03.14, October 21, 2014 FCAB REVIEW DATE: March 21, 2017
Notice: Administrative Rules are established per Seattle Fire Code Section 104.1, and they are subject to the Administrative Sections 104.9 Alternate Materials and Methods, Section 104.8 Modifications, and Section 108.1 Appeals.	APPROVED:  CHARLES CORDOVA, FIRE MARSHAL

Section 1. SCOPE

This Administrative Rule provides additional and/or modified requirements for automatic sprinkler and standpipe systems beyond those found in the referenced documents. All of the sprinkler requirements apply to NFPA13 and 13R systems, unless stated otherwise in specific sections of this rule. The only item applicable to NFPA13D systems is Item 2.1.

Section 2. SPRINKLER REQUIREMENTS

2.1. A ten psi reserve 'cushion' between the available water supply pressure and the system design demand pressure is required. The reserve 'cushion' is not required for the hose allowance that is added to the demand flow at the sprinkler system point of connection to the water supply.

2.2. Sprinkler protection shall be provided in elevator shafts with elevators using combustible suspension means (belts) that do not provide at least an FT-1 rating, and in machine rooms and elevator pits for elevators having combustible hydraulic fluids. The sprinklers shall be installed in accordance with Seattle Fire Department Administrative Rule 9.06.14 (Seattle Department of Construction and Inspections Director's Rule 7-2014).

2.3. Sprinkler protection shall be provided under areas of buildings where above-grade floors extend more than four feet beyond the exterior wall below, and in recessed entries or exits more than four feet deep.

Exceptions:

1. Sprinkler protection is not required under such areas described above where the construction meets one of the NFPA 13 provisions to omit sprinklers below exterior projections, and the area below is limited to pedestrian circulation, seating or landscaping.
2. Sprinkler protection is not required under such areas described above where the underside of the building extension is 20 feet or more above grade, or floor level.
3. Sprinkler protection is not required under such areas described above for NFPA 13R sprinkler systems.

2.4. Sprinkler protection shall be provided under exterior projections such as balconies, decks and ground floor patios where there is a roof or deck above having a combined projection and/or building recess of more than four feet in depth. Where the depth varies, sprinkler protection is only required for those areas with depths more than four feet.

Exceptions:

1. Sprinkler protection is not required for exterior balconies, decks or ground floor patios on floors with Group B occupancies where the construction complies with one of the NFPA 13 provisions to omit sprinklers below exterior projections.
2. Sprinkler protection is not required under projections for NFPA 13R systems in buildings that are not type V construction.
3. If located over storage of combustible materials, the depth at which sprinklers are required is reduced to two feet.

2.5. Sprinkler protection shall be provided under non-combustible canopies on roofs over open flame cooking devices. Sprinkler protection is required over the open flame cooking device and 15 feet beyond.

Exception: Sprinkler protection is not required under canopies for NFPA 13R sprinkler systems.

2.6. Sprinkler protection shall be provided at each main floor landing in exit enclosures and stairways.

2.7. Sprinkler protection shall be provided under solar photovoltaic arrays located on roofs of buildings.

Exceptions:

1. Sprinkler protection is not required under solar photovoltaic arrays on roofs, when the arrays are located near the roof level and not considered weather protection for occupants or storage, regardless of the array construction.
2. Sprinkler protection is not required under solar photovoltaic arrays used as weather protection if the canopy is not located over storage of combustible materials or over open flame cooking devices, and the construction of the array and supporting structure complies with one of the NFPA 13 provisions to omit sprinklers below exterior projections.

2.8. Sprinkler protection may be omitted from spaces above cloud ceilings when permitted by Section 8.15.24 of the 2016 Edition of NFPA 13.

2.9. Protection of individual storage units located in common use areas of a building shall be in accordance with one of the following:

1. Sprinkler heads installed within each storage unit.

2. Sprinkler protection is not required within each unit when in compliance with all of the following:

   a. The unit does not have full height solid walls. The top of the unit walls shall be such that the walls do not violate the NFPA 13 obstruction rules for the sprinkler heads in the vicinity of the storage units.
   b. The floor area of the unit is within the coverage area of sprinkler heads located outside the unit.
   c. The solid portion of the storage unit walls do not violate the obstructions rules of NFPA 13.
   d. Wire mesh of a minimum thickness of 11-gage shall be installed horizontally across the top of the unit at least 18 inches below the level of the sprinkler head to restrict the height of storage.
   e. No storage is allowed on top or above the wire mesh. The mesh shall not be covered with plastic sheet or other obstructions to the sprinkler discharge pattern.

3. Sprinkler protection is not required within each individual storage unit when the room or area is provided with an Extra hazard Group 2 sprinkler system. The sprinkler design is permitted to be limited to the room only, regardless of the fire resistance rating of the room walls. If the storage units are not within a room, the sprinkler design shall extend 15 feet beyond the units. Sprinkler heads shall be spaced based on the location of the room walls, not the front on the storage units.

2.10. Existing sprinkler pipe in areas being remodeled and consisting primarily of sprinkler relocations may retain the existing methods of hanging, bracing, and restraint. New or relocated branch lines, cross and feed mains shall be provided with hangars and seismic bracing conforming to current standards. See 2.12 for projects that are a substantial alteration.

2.11. New sprinklers heads being installed in existing light hazard occupancies are required to be quick response heads. Projects that are a substantial alteration shall comply with Section 2.12..

Exception: Remodel projects with existing standard response sprinkler heads that affect less than 30% of the sprinkler heads within a compartment are permitted to use standard response heads throughout the compartment. If any sprinklers within a compartment are changed to quick response then all of the sprinklers within the compartment are required to be changed to quick response.

2.12. Sprinkler systems in projects determined by the Seattle Department of Construction and Inspections to be a substantial alteration shall be upgraded to meet all applicable current code requirements.

Exception: If an alteration is substantial only because it is a change to a more hazardous occupancy, compliance with this section is only required if the life hazard risk increases as determined by Chapter 3 of the Seattle Existing Building Code.

2.13. Provide a contrasting label on the door to the sprinkler control room that reads “SPRINKLER CONTROL ROOM” in minimum one inch letters.

2.14. All control valves shall be installed in accessible locations and be visible from the floor without removing or moving ceiling panels or other visible obstructions. Accessible locations shall not require access through hatches or the use of portable ladders. Valves located more than seven feet above a floor shall be provided with a permanent means of accessing or operating the valve such as a ladder or chain-operated hand wheels. Valves shall not be located within dwelling units.

Exception: Valves are permitted to be within dwelling units in single family residences and duplexes.

2.15. Fire pump room construction and separation from other areas of the building shall be in accordance with NFPA 20 and Seattle Building Code Section 913.2.1. Fire pump rooms not directly accessible from the outside are not required to be accessible through an enclosed passageway from an enclosed stairway or exterior exit.

2.16. Supply mains for automatic sprinklers may be located under building slabs for a maximum length of ten feet.

Exception: Combined domestic and fire supplies are not limited.

2.17. Hose stations are not required to be installed in high pile storage occupancies.

Section 3. STANDPIPE AND FIRE DEPARTMENT CONNECTION REQUIREMENTS

3.1. Class I standpipes may be manual dry standpipe systems in non-high rise buildings.

Exception: Where wet standpipes are required in underground transportation tunnels.

3.2. The 2½-inch outlet installed in cabinets shall be turned so that it faces out of the cabinet.

3.3. Fire department connection inlet ports shall be 2½-inch swivel female couplings with national standard thread.

3.4. A fire department connection with a minimum of four 2½-inch inlet ports shall be provided for six inch and larger standpipes. Standpipes with two 2½-inch ports are acceptable on standpipes with pipe sizes of four inch and smaller.

3.5. All fire department connections shall be located at least ten feet away from primary building exits.

3.6. In accordance with Seattle Fire Code Section 507.5.1.1, buildings equipped with a standpipe system are required to have a fire hydrant within 100 feet of the fire department connections. The distance may be increased to 400 feet where the building is sprinklered throughout and the fire department connections are not more than 400 feet from a hydrant.

3.7. Caps on 2½-inch outlet valves shall incorporate a 1/8-inch hole for pressure relief.

3.8. Fire department connections for NFPA 13 or 13R systems in townhouse style or similar residential buildings may be omitted when each townhouse or dwelling unit has a separate sprinkler system with separate water supply service for each unit, and where any common areas requiring sprinkler protection can be protected by sprinklers from the individual dwelling units (such as by using sidewall sprinklers or dry pendants) without needing to provide a separate sprinkler system for common area coverage.

3.9. All control valves shall be installed in accessible locations and be visible from the floor without removing or moving ceiling panels or other visible obstructions. Accessible locations shall not require access through hatches or the use of portable ladders. Valves located more than seven feet above a floor shall be provided with a permanent means of accessing or operating the valve such as a ladder or chain-operated hand wheels. Valves shall not be located within dwelling units.

Section 4. HIGH RISE REQUIREMENTS

4.1. Dual/redundant automatic refill lines, each capable of refilling the tank at a minimum rate of 150 percent of the fire pump(s) capacity, shall be provided for the on-site water storage tank. Each refill line shall have separate tank fill valves arranged for automatic operation. Each automatic tank fill valve shall be provided with a separate approved means of actuation such as float assemblies, pressure sensors, etc. that are supervised by the fire alarm system. The status of the valves (i.e., ‘open’, ‘closed’) shall be indicated at the valves and in the Fire Command Center (FCC). The tank shall be kept filled, and the water level shall never be more than four inches below the designated fire service level.

Exception: Automatic fill systems are not required when two fire pumps are installed, one primary and one secondary. The primary fire pump shall be supplied by a dedicated fire service main and the secondary fire pump supplied from the storage tank. The pumps shall operate at the same rated flow capacity and at similar discharge pressures. A manual means to fill the tank shall be provided and sized to fill the tank in a maximum time of eight hours. The tank shall be kept filled, and the water level shall never be more than four inches below the designated fire service level.

4.2. An approved means to prevent the tank from overflowing into the building shall be provided. Where an automatic shutoff valve is provided, it shall be listed for fire service and have dual (redundant) means of actuation such as two float assemblies, pressure sensors, etc. that are supervised by the fire alarm system. The valve shall be supervised by the fire alarm system and status (i.e., ‘open’, ‘closed’) indicated at the valve and in the FCC.

Exception: Overflow prevention is not required when there is no automatic fill system installed, as permitted in the exception to Section 4.1.

4.3. Two tank level indicators shall be provided, one located in the FCC and another in the immediate vicinity of the tank fill valves. The tank level indicator monitoring shall be provided through the fire alarm system in accordance with NFPA 72. Two separate and distinct signals shall be initiated: one indicating that the required water level has been lowered or raised (off-normal), and the other indicating restoration. The off-normal signal shall be initiated when the water level falls three inches or rises three inches.

4.4. Separate and distinct tank low level audible and visible alarms shall be provided in the FCC and in the vicinity of the tank fill valves. The alarms shall be activated when the tank water level drops below 50% capacity. The tank low level monitoring shall be provided through the fire alarm system in accordance with NFPA 72. The signaling devices shall be clearly labeled “Water Tank Low Level Alarm” or equivalent. An independent silence switch shall be provided for the tank low level alarms in the immediate vicinity of the alarm devices.

4.5. A full size by-pass shall be installed around the storage tank and the fire pump in accordance with NFPA 20. The by-pass shall be installed on the supply side of the tank fill valves and connected to the system on the downstream side of the fire pump and any sprinkler system pressure regulating valves installed on feed mains.

Section 5. INSPECTION REQUIREMENTS

5.1. Standpipes shall be hydrostatically tested at a minimum of 200 psi for two hours at the topmost outlet, or 50 psi above the design pressures in the system whichever is greater.

5.2. The standpipe flow test is not required during system acceptance testing or thereafter. However, flow testing of any pressure reducing devices is required at acceptance and in accordance with maintenance testing requirements.

5.3. Hydrostatic testing is required for sprinkler system modifications where pipe greater than two inches has been altered.

5.4. Seattle Fire Department inspection of all overhead sprinkler piping, hangers, sway bracing, etc. prior to cover or concealment is required. Escutcheons or covers for concealed sprinklers must be left off for inspection purposes. Additional inspection after installing the covers is not required. Call (206) 386-1443 between 8:00 and 9:00 AM to schedule fire department inspection after the work is complete but before cover.

5.5. The fire department must inspect all joints, thrust blocks, tie-rods, etc. for new underground pipe prior to cover, and witness the hydrostatic test and flush prior to connection of the sprinkler system to the supply piping. Minimum depth of bury for underground piping shall not be less than three feet. The use of existing pipe for new systems shall be subject to inspection or flow test to determine the extent of tuberculation within the pipe.

> Exception**:** Sprinkler systems supplied with a combined domestic/fire main metered by a domestic service meter. Flushing of combined domestic/fire mains shall be documented on the appropriate Contractor’s Material and Test Certificate.

5.6. Completed Contractor's Material and Test Certificates for Aboveground Piping and Underground Piping, signed by an authorized representative of the installing contractor, must be provided to the fire department inspector prior to final acceptance of the sprinkler system.

5.7. For backflow preventers installed outside of buildings, contact the Seattle Public Utilities Water Quality Inspector at (206) 233-2635 at least 48 hours in advance to schedule backflow prevention assembly inspection prior to fire department final inspection/acceptance testing. For backflow preventers installed inside buildings, call (206) 233-2621.The installation of a backflow preventer requires a permit from and inspection by the Environmental Health Services Division of King County. Permit and inspection information can be found at: http://kingcounty.gov/healthservices/health/ehs/plumbing/downloads.aspx. See also: http://www.seattle.gov/util/myservices/water/water_quality/crossconnectioncontrol/

Section 6. PLAN SUBMITTAL REQUIREMENTS

6.1. Submittals shall include all information required by NFPA 13 Plans must include water supply information from a flow test conducted within ten years in close proximity to the project site and in the same pressure zone and on the main to be tapped for sprinkler protection. For existing water supply information, or to schedule a flow test with SPU, go to: http://www.seattle.gov/util/forbusinesses/water/waterservice/installwatermains/hydrantflowtest/

6.2. Submittals are not required for relocation or addition of six or fewer devices on an existing system. Call (206) 386-1443 between 8:00 and 9:00 AM to schedule fire department inspection after the work is complete but before cover.

SEATTLE FIRE DEPARTMENT

Administrative Rule 9.04.17

SUBJECT: **IMPAIRED FIRE PROTECTION SYSTEMS**	EFFECTIVE DATE: April 20, 2017
REFERENCES: Seattle Fire Code Chapter 9 NFPA 72 NFPA 25	SUPERSEDES: Administrative Rule 9.04.14, October 23, 2014
	FCAB REVIEW DATE: March 21, 2017
NOTICE: Notice: Administrative Rules are established per Seattle Fire Code Section 104.1, and they are subject to the Administrative Sections 104.9 Alternate Materials and Methods, Section 104.8 Modifications, and Section 108.1 Appeals.	APPROVED: CHARLES CORDOVA, FIRE MARSHAL

Section 1. SCOPE

This rule specifies requirements for fire department notification and mitigation measures for impaired fire protection systems and shall apply to fire protection systems and equipment as defined in the Seattle Fire Code, and any other systems as set forth by the fire code official.

Section 2. DEFINITIONS

For the purposes of this rule the following words and terms have the meanings indicated below:

Deficiency. A condition in which a system or portion thereof is damaged, inoperable, or in need of service, but does not rise to the level of an impairment.

Emergency Impairment. An abnormal condition where a system, component, or function is out of service due to an unexpected deficiency.

Fire Watch. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

Impairment. A condition where a fire protection system or unit or portion thereof is out of service, and the condition can result in the fire protection system or unit not functioning in a fire event.

Impairment Coordinator. The person responsible for the maintenance of a particular fire protection system.

Impairment Tag. A tag used to indicate that a system, or portion thereof, has been removed from service.

Planned Impairment. An abnormal condition where a system, component, or function is out of service due to work that has been planned in advance.

Section 3. GENERAL

The term impairment broadly encompasses a range of circumstances where a fire protection system, substantial portion of such a system, connection to central station monitoring, or a system component is not functioning properly for any number of reasons.

Temporarily shutting down a fire protection system as part of performing the routine inspection, testing, and maintenance on that system while under constant attendance by qualified personnel, and where the system can be restored to service quickly, is not considered an impairment.

Additionally, fire alarm systems are routinely impaired in areas with automatic detection during construction or during theatrical performances involving pyrotechnics, smoke or flame effects as well as to conduct normal fire alarm system maintenance and testing. Such impairments can be limited to specific initiating devices and/or functions (e.g., disconnecting the supervising station connection during system testing), or they can involve taking entire systems or portions of systems out of service.

Impairments can be planned or may be of an emergency nature, in either case the impairment coordinator is responsible to implement several steps outlined in Chapter 9 of the Seattle Fire Code.

Addition of new fire alarm devices or appliances, reprogramming of system software, or revisions to the water supply or sprinkler system piping for an automatic fire sprinkler system are examples of planned impairments.

Physical damage to a control unit or wiring, an operated sprinkler or system leakage, interruption of water supply, frozen or ruptured piping, and equipment failure are examples of emergency impairments.

Section 4. IMPAIRMENT COORDINATOR

The building owner shall assign an impairment coordinator to comply with the requirements of Chapter 9 of the Seattle Fire Code and this Administrative Rule. In the absence of a specific designee, the owner shall be considered the impairment coordinator.

Where the lease, written use agreement, or management contract specifically grants the authority for inspection, testing, and maintenance of the fire protection system(s) to the tenant, management firm, or managing individual, the tenant, management firm, or managing individual shall assign a person as impairment coordinator.

Section 5. IMPAIRMENT TAG

IMPAIRMENT (RED) TAG – Impaired System/System Out of Service
Fire protection system(s) that are impaired for any length of time shall be tagged with a red impairment tag.

The code requires the use of a clearly visible tag to alert building occupants and the fire department that all or part of the required fire protection system is impaired. The tag or label shall be clearly visible, weather resistant, of sufficient size (typically 4 inches x 6 inches) and be of the self-adhesive type or the wire-hanging type. The tag shall include the following information:

1. The words "**DO NOT REMOVE BY ORDER OF THE FIRE MARSHAL**."
2. Name, address and telephone number of the business or firm performing the testing.
3. Date that work was performed.
4. Printed name of person performing work.
5. Seattle Fire Department certification number of person performing work.
6. Description of work performed.
7. Name of impairment coordinator.

The following format should be used for all red impaired system tags and labels:

<table>
<tr><td colspan="4">IMPAIRED SYSTEM</td></tr>
<tr><td rowspan="7">DO NOT REMOVE

By Order of the Fire Marshal</td><td>Date and Time Impairment Began</td><td>Anticipated Date and Time System Will Be Returned to Service</td><td>Impairment Type

☐ Planned

☐ Emergency</td></tr>
<tr><td colspan="3">Testing Firm</td></tr>
<tr><td colspan="3">Address</td></tr>
<tr><td colspan="3">Phone</td></tr>
<tr><td colspan="3">Serviced by</td></tr>
<tr><td colspan="3">Certificate No.</td></tr>
<tr><td colspan="3">Impairment Coordinator</td></tr>
<tr><td colspan="4">Description of impairment:</td></tr>
<tr><td colspan="4"></td></tr>
<tr><td colspan="4"></td></tr>
</table>

Note: The Seattle Fire Department must be notified when a system is anticipated to be impaired for eight hours or more. See the separate section below regarding mandatory notification requirements for impairments.

Unless otherwise directed the impairment tag shall be posted at the following locations:

Fire Protection System Type	Location of Red Impairment Tags
Alternative Extinguishing Systems (CO^2, clean agent, dry chem)	On the agent supply tank or pull device
Automatic Sprinkler Systems	On or adjacent to the sprinkler control valve, and at each fire department connection (FDC)
Emergency Alarm Systems (Haz Mat)	In a readily viewable location
Emergency Generators	On the control panel
Fire Alarm Systems	Fire alarm panel/annunciator, and at Fire Command Center (FCC) if FCC present
Fire Pumps	On the pump controller, and at Fire Command Center (FCC) if FCC present
Portable Fire Extinguishers	Replace Fire Extinguisher
Rangehood	Control valve of extinguisher or cylinder
Smoke Control Systems	On the manual control panel, or fire alarm control panel if no smoke control panel is installed, and at Fire Command Center (FCC) if FCC present
Standpipe Systems	On or adjacent to the lowest outlet, and at each fire department connection (FDC)
Standpipe Systems – Marinas	At each fire department connection (FDC) where multiple connections are present

Section 6. NOTIFICATION REQUIREMENTS FOR IMPAIRMENTS

If a planned or emergency impairment is anticipated to take a system out of service for eight hours or more, the Seattle Fire Department must be notified. This notification allows the Department to assess the risks and make any operational decisions necessary to ensure response-readiness and the safety of building occupants and fire fighters.

Timelines for Notification

Planned Impairments When a system is anticipated to be out of service eight hours or more due to a planned impairment, the Seattle Fire Department shall be notified at least five business days in advance, with longer notice being preferable to allow the Fire Department to assess risks. We recommend that you notify the Seattle Fire Department immediately upon beginning to plan for the impairment.

Emergency Impairments When a system is anticipated to be out of service for eight hours or more due to an emergency impairment, the Seattle Fire Department shall be notified immediately.

Notification Process The notification process has two mandatory steps:

1. Call the systems impairment hotline the Seattle Fire Department at 206-233-7219 and provide the following information:

   ✓Caller name, company name and phone number.
   ✓Name and address of the building affected.
   ✓Name of the building owner, or occupant and phone number, if known.
   ✓Nature of the impairment; specifically which system has problem (fire alarm, sprinkler, etc.) including details on system locations or zones affected.
   ✓Estimated time before it will be restored to service, if known.
   ✓Mitigation measures implemented, if known.

2. E-mail a copy of the SFD Impaired System Report Form (see attached copy) to SFD_ Impairments@seattle.gov to provide written notification to the Seattle Fire Department.

In addition to the Fire Department, the insurance carrier, the alarm company, the building owner/manager, and/or any supervisors or tenants in the areas to be affected should be notified of the impairment and provided with an estimate of how long the system(s) might be out-of-service.

Section 7. FIRE WATCH

An approved fire watch, or other approved mitigation, is required for impairments to fire protection systems. The owner, agent, or lessee shall provide one or more qualified persons, as required and approved, to be on duty. Fire watch personnel shall remain on duty during the times affected buildings are open for general occupancy, open to the public, or as otherwise required by the fire code official.

A fire watch shall continuously patrol all areas of the building where the fire protection system is impaired or as otherwise required by the fire code official, or the entire building if a fire alarm system is impaired. All applicable areas of the building shall be visited at a frequency not to exceed 15 minutes.

Fire watch personnel shall be provided with an immediately accessible means of notifying the Fire Department (e.g. cellular telephone, land-line telephone, two-way radio to continuously staffed position).

A fire watch log shall be maintained at the facility and must be available for viewing by representatives of the Seattle Fire Department at all times during the fire watch. The log shall contain the following information:

- Address of the facility under fire watch.
- Description of fire watch duties (e.g. patrol route, systems to check, hazards to check).
- Location of telephone or cellular phone to notify Seattle Fire Department.
- Running list of persons conducting patrol, including name, starting and ending time of patrol shift, and signature.
- Record of any communication to the Seattle Fire Department and/or central station monitoring company.

During periods when the fire protection systems are impaired and the following building types are occupied, a dedicated fire watch is required:

Group/Division	Description
A	Assembly occupancies with posted occupant load is 50 or greater
R-1, R-2, and R-3	Hotels, apartments and congregate residences
I	Nursing homes, hospitals, day treatment centers, health care facilities providing care which render patients incapable of self-preservation, jails.
E	Schools through the 12th grade, preschools, day care centers with six or more children

Note: Fire watch patrols are limited to the building common areas and building facilities such as laundry, maintenance, and storage areas in residential (R) occupancies. Fire watch patrols are not expected to enter individual residential units.

In a mixed-use occupancy, if any portion of the affected building contains an occupied Group A, R-1, R-2, E or, I occupancy, dedicated fire watch requirements apply.

Example: A four story R-2 occupancy is located above a retail store (M occupancy). In the process of conducting a tenant improvement to the M occupancy, the fire alarm in the retail store is placed out-of-service. If a fire occurred in the M occupancy, residents in the R-2 occupancy would not receive notification of the fire. Therefore, a dedicated fire watch is required.

Building occupants performing their regular duties, including construction workers, are acceptable in lieu of a dedicated fire watch in the following types of occupancies during the hours the affected building is occupied:

Group/Division	Description
B	Offices Eating and drinking establishments with an occupant load less than 50
M	Stores accessible to the public
H	Occupancies containing hazardous materials
F-1	Moderate hazard factory and industrial occupancies

If you have questions regarding fire watch in a mixed-use occupancy, contact the Seattle Fire Department at 206-386-1450.

FIRE WATCH LOG – EXAMPLE

Crestwell Arms Apartment Building – 4 story building
12345 Main Street, Seattle WA
Fire Alarm – Impaired throughout the building
Fire Department notified 4-23-2007 via direct reporting line.
Patrol Route: Start in the basement, check the elevator machinery room, laundry room, storage areas, proceed upward to floors 1 through 4 checking all common areas.
One time checks – water pressure in sprinkler system

Tuesday, April 23, 2007

Date	Name	Fire watch Shift Start	Fire watch Shift End	Comments	Signature
4-23-07	Jane Doe	11:42 pm	2:00 am		
4-24-07	Jack Smith	2:00 am	6:00 am		
4-24-07	Ted Hall	6:00 am	10:00 am		
4-24-07	Jack Smith	10:00 am	10:30 am	Repair completed at 10:30 am by ABC Alarm Company. Fire Department notified.	

Section 9. RESTORING SYSTEMS TO SERVICE

When an impaired system is restored to normal working order, the impairment coordinator shall verify that necessary inspections and tests have been made and notification has been provided to the Fire Department, the insurance carrier, the alarm company, the building owner/manager, and/or any supervisors or tenants in the affected areas. SFD shall be notified by sending an email message to SFD_Impairments@seattle.gov. Include building address, system type, and date/time system was restored to service. In addition, the red tag shall be removed.